



## State of Utah

### Department of Natural Resources

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### Division of Oil, Gas & Mining

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February 17, 2005

Mike Glasson, Environmental Coordinator  
Andalex Resources Inc.  
P.O. Box 902  
Price, Utah 84501

Subject: MRP Rewrite, Andalex Resources, Inc, Tower Division. Wildcat Loadout,  
C/007/0033, Task ID #2089, Outgoing File

Dear Mr. Glasson:

The submittal, reviewed under Task #2089, was received 12/16/04. It revised Plates 1 (Surface Facilities), 2 (Surface Facilities Topography), 13 (Top Soil Storage Piles), Appendix B (including the bond calculations) and re-organized the text of the MRP with the following change: the facility can now handle 5.5 million tons per year through-put of coal.

As we discussed at the Price Field Office yesterday, the Division finds that organization of the information is problematic because it has an entry for each regulation. This has resulted in a document that has a 50-page table of contents and numerous "N/A" or "See R645-301-xxx" entries. In many cases, to find pertinent information, the reader must begin at the introduction and read through the narrative to find the pertinent information.

For instance many section headings refer to the introduction for information, as in:

R645-301-342 .  
FISH AND WILDLIFE  
See R645-301-310 .

R645-301-322.210 .  
THREATENED OR ENDANGERED SPECIES  
See R645-301-310.

The plan could include rule R645-301-342 on page 3-4 next to the fish and wildlife heading and on page 3-8 where threatened and endangered species are mentioned, the rule R645-301-322.210 could be added to the margin or as a text heading. This would enable the reader to quickly find the information cited.

Another possibility for improving the reformatted plan is to reduce unneeded references, as in Chapter 8, where every regulation cited has “N/A” or “see Appendix B” beneath. There are 18 pages in this chapter that has less than ½ a page of writing in it. Perhaps an introductory paragraph to Chapter 8 could indicate the information is found in Appendix B and that only certain regulations apply to this operation. In other chapters, where every regulation in a sequence is not applicable, perhaps only the major regulation of the sequence need be noted, i.e. R645-301-514.100 Excess Spoil could be noted as “N/A” rather than R645-301-514.100, -514.110, -514.111, -514.112, -514.113, -514.114, -514.120, -514.130, -514.131, -514.132, -514.133, and -514.140, all of which are “N/A.”

If only major rule headings were cited, the table of contents would be easier to use. For instance using R645-301-527 might replace all of the entries currently listed in the table of contents under the R645-301-527.100 sequence and R645-301-527.200 sequence. The same applies for the body of the narrative.

The Division has compared the existing and revised text for consistency and made the recommendations listed below. The application was reviewed under the Utah Rules for Coal Processing Plants Not Located Within the Permit Area of a Mine, **R645-302-260**. All provisions of R645-300 and R645-301 apply to this category of mining unless otherwise specified under R645-302.

**R645-301-112.300**, Changes to the principal shareholders of Andalex Resources, Inc. listed under R645-301-112.300 and R645-301-112.320 is necessary as detailed in correspondence on file with the Division dated August 26, 2002 and December 18, 2003 wherein ownership of Andalex Resources, Inc is through multiple parent companies, including:

- Ownership or control relationship to the applicant
- Percentage ownership
- Location in the organizational structure
- Addresses of the corporations within organizational structure
- Principal shareholders of all the above corporations.
- Ownership and control information must include officers and directors

**R645-301-112.400**, Legal and financial information provided in the application must include any coal mining and reclamation operation owned or controlled by either the applicant or by any person who owns or controls the applicant. i.e Although Genwal and West Ridge were noted on p. 1-7, the percentage ownership by Andalex in these mine operations was not noted and the ownership information for Centennial Mine must be mentioned as well.

**R645-301-113.300**, Although the application includes a listing of all violations received within the last three years prior to the date of this application (April 8, 2004) by Utah mines under the control of Andalex Resources, Inc. Tower Division, the plan must also include any unabated violations or cessation orders written to **affiliated companies within, the United States** or alternatively, the Permittee may state in the application that there have been no violations incurred by Andalex Resources, Inc. Tower Division and no unabated violations or cessation orders to **affiliated companies, within the United States**, during the three years preceding the date of the current application (April 8, 2004).

**R645-301-121.200**, Address these formatting issues that relate to biological and cultural disciplines to present the narrative more clearly:

- Update the correct number of plates.
- Reference the NRCS letter concerning productivity that is in the back of Chap. 3 in the Table of Contents for Chap. 3.
- Remove the reference to Appendix I (Sec. 310-321-200), which does not provide productivity values.
- Relocate information in the Fish and Wildlife Plan to a more appropriate section in Operations.
- Provide missing information or remove the reference to Fish and Wildlife Source Data information (Chap. 3, p. 3.4).
- Provide missing discussion in section 301-240 on how reclamation will enhance wildlife resources or remove the reference to 301-240 (Sec. 301-313), which does not address regulation 301-313.
- Provide the missing document or remove the reference to Appendix B (Sec. 301-322.300), which does not provide correspondence with the USFWS. Appendix B provides many correspondences, but not from USFWS.
- Relocate information concerning pest management in section 301-310 and 301-331 to the appropriate section in 301-357 series.
- Include pertinent information in sections 301-356 through 301-358. Referencing the reader for every regulation does not provide a clear and concise plan. The Permittee may want to copy some of the information from other chapters that follow the same regulation. However, the Permittee may want to relocate many paragraphs that are in sections where this referenced information is under the inappropriate section. For example,
  - Relocate or include pertinent information concerning success standards (e.g., 301-331) to the appropriate section in the 301-356 series. The information is in the MRP, it's just under inappropriate regulations.

- Address that 301-240 and 301-331 do not directly discuss 301-356.120, 301-356.200, and 301-356.210. Additionally, 301-240 does not directly discuss the following:
    - 301-356.230 series.
    - 301-357.311 and 301-357.312.
    - 301-357.340 series.
    - 301-357.360 series.
  - Briefly, specify why husbandry practices and bonding are not applicable for this application (301-357.300 through 301-357.310).
  - Include the map/aerial photo in Appendix F that 301-232 references.
- (2) Direct quotes from the Utah Coal Regulations do not substitute for addressing the following sections. Provide brief reasons how the Permittee plans to address related requirements (such as provided for 301-354).
- 301-353.120: Exactly where are non-natives necessary?
  - 301-353.130: Which area - the reference area?
  - 301-353.140: The rates must be in plants per square foot to determine adequate stabilization. Modify the units for final see mix table.
  - 301-353.210: Species Y are great for the proposed PMLU of....
  - 301-353.220: Are some cool and warm season species?
  - 301-353.240: Some of the selected species may not be compatible e.g., alfalfa or sweetclover (see Reclamation section for direction).
  - 301-353.250: Fax seed tag to the Division.
- (3) Appendix B should include the January 5, 2000 Air Quality Approval Order DAQE-005-00 (AO) that was incorporated into the plan on July 1, 2004.
- (4) The revised Plate 1 received on 12/16/2005 must include revegetation test plot locations A, B, C, D and new test plot adjacent to topsoil pile E.
- (5) Correct the incomplete sentence at bottom of page 2-2 beginning with "Andalex suggests.."
- (6) Clearly indicate in the Topsoil Pile Summary on page 2-3 that there are four stockpiles on the site (A, B, E, and F) and list the volume in each stockpile and the total volume.
- (7) All revised plates must be provided in digital format with at least four grid points identified.
- (8) The disturbed are provided on page 1-2 conflicts with that given on page 1-22
- (9) The Permittee must clarify the reference to Figure III-2 on page 7-2. There is no Figure III-2.

**R645-301-242.200**, Tables II and II-1 should include the reference map number for station locations.

**645-301-422**, (1) The application must account for the existing acreage of storage piles on site in the narrative (2) Plate 1 must identify all roads as primary or secondary.

**R645-301-521.170 and R645-301-521.190**, Plate 1 must indicate all primary roads and designate those primary roads that are dedicated haul roads (as per the air quality order). For the definition of primary roads see R645-301-527.120.

**R645-301-521.190**, Along with a hard copy, provide an electronic copy of each map provided to the Division.

**R645-301-722.300**, The Permittee needs to clarify the location of information on Monitoring Stations: there is no Section R645-301-712.240 in the current or revised MRP.

**R645-301-723**, The Permittee needs to commit to follow the "Standard Methods for the Examination of Water and Wastewater" or the methodology in 40 CFR Parts 136 and 434.

**R645-301-723**, The Permittee needs to clarify the location of information on Monitoring Stations under 722.300.

**R645-301-731.300**, The results of two samples from the refuse for Acid Base Accounting and selenium do not provide the Division with adequate information. The statement added to the MRP on page 7-5 that no further testing will be conducted is not acceptable and must be removed.

**R645-301-830**, The Division's reclamation cost estimate has changed in accordance with changes to the reclamation plan, see attached copies. Appendix B of the MRP must be updated with these revised cost estimates dated 2005.

The permit area covers 100.19 acres. The reclamation plan is for the 60.94 acre disturbed area. (Exhibit A of the Reclamation Agreement describes a 63.7-acre area.) The Division expects to continue refining the reclamation plan for this site in cooperation with the Permittee. For instance, utilizing soil within the permit area (based upon the soil survey conducted in March 2003, by Mr. Jim Nyenhuis), rather than off-site. And, Mr. Collins recommendation of removing Fairway crested wheatgrass from the seed mix is well taken. Also, the following techniques might also be evaluated in planning for reclamation: raking seed to increase shrub

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germination, applying polyacrylamide (PAM) to increase water infiltration, using wood-fiber hydromulch, eliminating fertilizer, and changing the timing of seeding.

Finally, the plan indicates that the revegetation test plot areas A – D represent the whole of the disturbed area. Thus, when 73,000 cu yds are moved (Table II) during grading, whatever material winds up on the surface will be suitable for reclamation. The Division is awaiting the results of the 2005 quantitative information from the revegetation test plots before commenting on this reclamation plan.

Please contact either Priscilla Burton (801) 538-5288 or me at (801) 538-5268 for further discussion or clarification of these issues.

Sincerely,

Pamela Grubaugh-Littig  
Permit Supervisor

PWB:an  
Attachment: folder2089\_bondfiles  
cc: Price Field Office  
O:\007033.WCL\FINAL\WG2089\021705\_2089cover&list.doc

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Loading Bin 01																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	15	15	12								FT		2700	CF	540
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			540
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	30	18	1								FT		20	CY	72
	Concrete's Vol. Demolished																1.3	26	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													26	CY	36
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rd. tri	02315 490 0320	3.44	/CY													26	CY	89
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													26	CY	198
	Subtotal																			395
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			935

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Scales 02																			
	Structure's Demolition Cost	Mixed Materials Bld. Large	02220 110 0100	0.21	/CF	14	60	8								FT		6720	CF	1411
	Structure's Vol. Demolished																0.35	87	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel	City Services	City Service Price	4	/CY													87	CY	348
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			1759
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	14	60	8								FT		6720	CF	1344
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			1344
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	14	70	0.5								FT		18	CY	65
	Concrete's Vol. Demolished																1.3	23	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													23	CY	32
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tri	02315 490 0320	3.44	/CY													23	CY	79
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													23	CY	175
	Subtotal																			351
	Asphalt's Demolition Cost																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	10	12	0.25								FT		1	CY	4
	Concrete's Vol. Demolished																1.3	1	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													1	CY	1
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tri	02315 490 0320	3.44	/CY													1	CY	3
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													1	CY	8
	Subtotal																			16
	Road's Demolition Cost																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	340	20	0.25								FT		63	CY	228
	Concrete's Vol. Demolished																1.3	82	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													82	CY	114
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tri	02315 490 0320	3.44	/CY													82	CY	282
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													82	CY	623
	Subtotal																			1247
	Total																			4717



Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Substation 03																			
	Structure's Demolition Cost	Mechanical equipment heavy	15055 300 3600	805	/ton									3		ton		3 ton		2415
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			2415
	Equipment 's Disposal Cost																			
	Dismantling Cost	Chain link remove 8'-10'	02220 220 1700	0	/LF	250										FT		250 FT		0
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			0
	Equipment 's Disposal Cost	Powerpole	Hiawatha	100	EA											13 Ea		13 EA		1300
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			1300
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	25	15	0.5										7 CY		25
	Concrete's Vol. Demolished																1.3	9 CY		
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													9 CY		13
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rd. tri	02315 490 0320	3.44	/CY													9 CY		31
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													9 CY		68
	Subtotal																			137
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	25	15	0.5										7 CY		25
	Concrete's Vol. Demolished																1.3	9 CY		
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													9 CY		13
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rd. tri	02315 490 0320	3.44	/CY													9 CY		31
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													9 CY		68
	Subtotal																			137
	Total																			3989

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Truck Dump West 04																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	40	14	15								FT		8400	CF	1680
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			1680
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY						50					CY		50	CY	181
	Concrete's Vol. Demolished																1.3	65	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													65	CY	90
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tri	02315 490 0320	3.44	/CY													65	CY	224
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													65	CY	494
	Subtotal																			989
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			2669

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Crushing Plant West 05																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	20	15	10								FT		3000	CF	600
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			600
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	20	15	1								FT		11	CY	40
	Concrete's Vol. Demolished																1.3	14	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY															
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rd. tri	02315 490 0320	3.44	/CY															19
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY															48
	Subtotal																			106
	Concrete Demolition																			213
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			813

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Radial Stacker West 06																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	150	8	8								FT		9600	CF	1920
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			1920
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	150	8	1								FT		44	CY	159
	Concrete's Vol. Demolished																1.3	57	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													57	CY	79
	Transportation Cost	12 CY (18 Ton) Dump Truck 1/2 mi. md. tr	02315 490 0320	3.44	/CY													57	CY	196
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													57	CY	433
	Subtotal																			887
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			2787

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Reclaim Tunnel West 07																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	190	14	8								FT		21280	CF	4256
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			4256
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	190	14	1								FT		99	CY	358
	Concrete's Vol. Demolished																1.3	129	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY															
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tri	02315 490 0320	3.44	/CY															179
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY															444
	Subtotal																			980
	Concrete Demolition																			1061
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			6217

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Loadout Conveyor West 08																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	320	4	4								FT		5120	CF	1024
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			1024
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	TOTAL																			1024

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Control Building West 09																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	30	15	8								FT		3600	CF	720
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			720
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	40	20	0.5								FT		15	CY	54
	Concrete's Vol. Demolished																1.3	20	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													20	CY	28
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rd. tri	02315 490 0320	3.44	/CY													20	CY	69
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													20	CY	152
	Subtotal																			303
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			1023

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
	Truck Dump Reclaim 10																				
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	40	14	15								FT		8400	CF	1680	
	Structure's Vol. Demolished																				
	Rubble's Weight (exclude steel)																				
	Truck's Capacity																				
	Haulage																				
	Transportation Cost Non Steel Truck																				
	Transportation Cost Non Steel Drive																				
	Disposal Cost Non Steel																				
	Steel's Weight																				
	Truck's Capacity																				
	Haulage																				
	Transportation Cost Steel Truck																				
	Transportation Cost Steel Truck Drive																				
	Disposal Cost Steel																				
	Subtotal																			1680	
	Equipment's Disposal Cost																				
	Dismantling Cost																				
	Equipment's Vol. Demolished																				
	Loading Costs																				
	Transport Costs																				
	Disposal Costs																				
	Subtotal																				
	Concrete Demolition																				
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY						75					CY		75	CY	272	
	Concrete's Vol. Demolished																1.3	98	CY		
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY														98	CY	136
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tri	02315 490 0320	3.44	/CY														98	CY	337
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY														98	CY	745
	Subtotal																			1490	
	Concrete Demolition																				
	Demolition Cost																				
	Concrete's Vol. Demolished																				
	Loading Cost																				
	Transportation Cost																				
	Disposal Costs																				
	Subtotal																				
	Concrete Demolition																				
	Demolition Cost																				
	Concrete's Vol. Demolished																				
	Loading Cost																				
	Transportation Cost																				
	Disposal Costs																				
	Subtotal																				
	Total																			3170	



Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Conveyor T 11																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	250	4	4								FT		4000	CF	800
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			800
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	15	35	1								FT		19	CY	69
	Concrete's Vol. Demolished																1.3	25	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													25	CY	35
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rd. tri	02315 490 0320	3.44	/CY													25	CY	86
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													25	CY	190
	Subtotal																			390
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			1180

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
	Crusher Screen Plant 12																				
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	44	20	15								FT		13200	CF	2640	
	Structure's Vol. Demolished																				
	Rubble's Weight (exclude steel)																				
	Truck's Capacity																				
	Haulage																				
	Transportation Cost Non Steel Truck																				
	Transportation Cost Non Steel Drive																				
	Disposal Cost Non Steel																				
	Steel's Weight																				
	Truck's Capacity																				
	Haulage																				
	Transportation Cost Steel Truck																				
	Transportation Cost Steel Truck Drive																				
	Disposal Cost Steel																				
	Subtotal																			2640	
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	35	30	8								FT		8400	CF	1680	
	Structure's Vol. Demolished																				
	Rubble's Weight (exclude steel)																				
	Truck's Capacity																				
	Haulage																				
	Transportation Cost Non Steel Truck																				
	Transportation Cost Non Steel Drive																				
	Disposal Cost Non Steel																				
	Steel's Weight																				
	Truck's Capacity																				
	Haulage																				
	Transportation Cost Steel Truck																				
	Transportation Cost Steel Truck Drive																				
	Disposal Cost Steel																				
	Subtotal																			1680	
	Concrete Demolition																				
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	57	50	1								FT		106	CY	384	
	Concrete's Vol. Demolished																1.3	138	CY		
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY														138	CY	192
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rd. tri	02315 490 0320	3.44	/CY														138	CY	475
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY														138	CY	1049
	Subtotal																			2100	
	Concrete Demolition																				
	Demolition Cost																				
	Concrete's Vol. Demolished																				
	Loading Cost																				
	Transportation Cost																				
	Disposal Costs																				
	Subtotal																				
	Total																			6420	

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Lump Coal Belt 13																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	100	3	3								FT		900	CF	180
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			180
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY						10					CY		10	CY	36
	Concrete's Vol. Demolished																1.3	13	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													13	CY	18
	Transportation Cost	12 CY (18 Ton) Dump Truck 1/2 mi. md. tr	02315 490 0320	3.44	/CY													13	CY	45
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													13	CY	99
	Subtotal																			198
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			378

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Stoker Radial Stacker 14																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	100	10	10								FT		10000	CF	2000
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			2000
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	60	8	1								FT		18	CY	65
	Concrete's Vol. Demolished																1.3	23	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													23	CY	32
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rd. tri	02315 490 0320	3.44	/CY													23	CY	79
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													23	CY	175
	Subtotal																			351
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			2351

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Conveyor Y 15																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	600	4	4										9600	CF	1920
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			1920
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	35	15	1										19	CY	69
	Concrete's Vol. Demolished																1.3	25	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													25	CY	35
	Transportation Cost	12 CY (18 Ton) Dump Truck 1/2 mi. rd. tr	02315 490 0320	3.44	/CY													25	CY	86
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													25	CY	190
	Subtotal																			380
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			2300

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Main Radial Stacker 16																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	260	15	15								FT		58500	CF	11700
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			11700
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	280	10	1								FT		104	CY	376
	Concrete's Vol. Demolished																1.3	135	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY															
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rd. tri	02315 490 0320	3.44	/CY															188
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY															464
	Subtotal																			1026
	Concrete Demolition																			2054
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			13754

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Loadout Reclaim 17																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	750	4	8								FT		24000	CF	4800
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			4800
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	750	14	1								FT		389	CY	1408
	Concrete's Vol. Demolished																			
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY												1.3	506	CY	703
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rd. tri	02315 490 0320	3.44	/CY													506	CY	1741
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													506	CY	3846
	Subtotal																			7698
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			12498

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Loadout Tower 18																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	35	40	60								FT		84000	CF	16800
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			16800
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	12	8	1								FT		4	CY	14
	Concrete's Vol. Demolished																1.3	5	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													5	CY	7
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tri	02315 490 0320	3.44	/CY													5	CY	17
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													5	CY	38
	Subtotal																			76
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	12	18	1								FT		8	CY	29
	Concrete's Vol. Demolished																1.3	10	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													10	CY	14
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tri	02315 490 0320	3.44	/CY													10	CY	34
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													10	CY	76
	Subtotal																			153
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	40	60	1								FT		89	CY	322
	Concrete's Vol. Demolished																1.3	116	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													116	CY	161
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tri	02315 490 0320	3.44	/CY													116	CY	399
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													116	CY	882
	Subtotal																			1764
	Total																			18793



Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Office 19																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	40	30	8								FT		9600	CF	1920
	Structure's Vol. Demolished																0.35	124	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel	City Services	City Service Price	4	/CY													124	CY	496
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			2416
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	66	30	0.5								FT		37	CY	134
	Concrete's Vol. Demolished																1.3	48	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													48	CY	67
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rd. tri	02315 490 0320	3.44	/CY													48	CY	165
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													48	CY	365
	Subtotal																			731
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	70	35	0.5								FT		45	CY	163
	Concrete's Vol. Demolished																1.3	59	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													59	CY	82
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rd. tri	02315 490 0320	3.44	/CY													59	CY	203
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													59	CY	448
	Subtotal																			896
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			4043

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Powerline 20																			
	Structure's Demolition Cost	Powerpole	Hiawatha	100	EA										25	EA		25	EA	2500
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			2500
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			2500

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Shop 21																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	40	45	20								FT		36000	CF	7200
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			7200
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	45	45	1								FT		75	CY	272
	Concrete's Vol. Demolished																1.3	98	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													98	CY	136
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tr	02315 490 0320	3.44	/CY													98	CY	337
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													98	CY	745
	Subtotal																			1490
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			8690

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	GuardRails 22																			
	Structure's Demolition Cost	Guiderail remove	02220 240 0800	11.9	LF	1000										FT		1000	FT	11900
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			11900
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			11900

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Culverts 23																			
	Excavate Culvert 12"	Excavation Bulk Bank 2 CY (322BL)	02315 424 0260	1.7	/CY	650	1	2								FT		48	CY	82
	Backfill Culvert 12"	Backfill Trench Mininal Haul 2 1/4 CY	02315 610 3080	1.53	/CY	650	1	2								FT		48	CY	73
	Excavate Culvert 15"	Excavation Bulk Bank 2 CY (322BL)	02315 424 0260	1.7	/CY	400	1.3	2.6								FT		50	CY	85
	Backfill Culvert 15"	Backfill Trench Mininal Haul 2 1/4 CY	02315 610 3080	1.53	/CY	400	1.3	2.6								FT		50	CY	77
	Excavate Culvert 18"	Excavation Bulk Bank 2 CY (322BL)	02315 424 0260	1.7	/CY	310	1.5	3								FT		52	CY	88
	Backfill Culvert 18"	Backfill Trench Mininal Haul 2 1/4 CY	02315 610 3080	1.53	/CY	310	1.5	3								FT		52	CY	80
	Excavate Culvert 24"	Excavation Bulk Bank 2 CY (322BL)	02315 424 0260	1.7	/CY	1440	2	4								FT		427	CY	726
	Backfill Culvert 24"	Backfill Trench Mininal Haul 2 1/4 CY	02315 610 3080	1.53	/CY	1440	2	4								FT		427	CY	653
	Excavate Culvert 36"	Excavation Bulk Bank 2 CY (322BL)	02315 424 0260	1.7	/CY	80	3	6								FT		53	CY	90
	Backfill Culvert 36"	Backfill Trench Mininal Haul 2 1/4 CY	02315 610 3080	1.53	/CY	80	3	6								FT		53	CY	81
	Subtotal																			2035
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			2035

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Miscellaneous 24																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			
	Water Tank																			
	Equipment's Disposal Cost	6000 gal. to 8000 gal. tank	02115 200 0120	845	Ea.						8000					GAL		1 EA		845
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs	6000 gal. to 8000 gal. tank	02115 200 1026	825	Ea.						8000					GAL		1 EA		825
	Disposal Costs																			
	Subtotal																			1970
	Water Tank																			
	Equipment's Disposal Cost	6000 gal. to 8000 gal. tank	02115 200 0120	845	Ea.						6000					GAL		1 EA		845
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs	6000 gal. to 8000 gal. tank	02115 200 1026	825	Ea.						8000					GAL		1 EA		825
	Disposal Costs																			
	Subtotal																			1970
	Water Tank																			
	Equipment's Disposal Cost	9000 gal to 12000 gal tank	02115 200 0130	1275	Ea.						10000					GAL		1 EA		1275
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs	9000 gal to 12000 gal tank	02115 200 1029	1100	Ea.						10000					GAL		1 EA		1100
	Disposal Costs																			
	Subtotal																			2375
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			5715

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Truck Dump New 25																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	40	14	15								FT		8400	CF	1680
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	<b>Subtotal</b>																			<b>1680</b>
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	<b>Subtotal</b>																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY						75					CY		75	CY	272
	Concrete's Vol. Demolished																1.3	98	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													98	CY	136
	Transportation Cost	12 CY (18 Ton) Dump Truck 1/2 mi. rd. tr	02315 490 0320	3.44	/CY													98	CY	337
	Disposal Costs	On site disposal	02220 240 5550	7.8	/CY													98	CY	745
	<b>Subtotal</b>																			<b>1490</b>
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	<b>Subtotal</b>																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	<b>Subtotal</b>																			
	<b>Total</b>																			<b>3170</b>

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Conveyor New 26																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	250	4	4								FT		4000	CF	800
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	<b>Subtotal</b>																			<b>800</b>
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	<b>Subtotal</b>																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	15	15	1								FT		8	CY	29
	Concrete's Vol. Demolished																1.3	10	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													10	CY	14
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rd. tri	02315 490 0320	3.44	/CY													10	CY	34
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													10	CY	76
	<b>Subtotal</b>																			<b>153</b>
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	<b>Subtotal</b>																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	<b>Subtotal</b>																			
	<b>Total</b>																			<b>953</b>



Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Radial Stacker New 27																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	250	15	15								FT		56250	CF	11250
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	<b>Subtotal</b>																			11250
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	<b>Subtotal</b>																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY	260	10	1								FT		96	CY	348
	Concrete's Vol. Demolished																1.3	125	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													125	CY	174
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tri	02315 490 0320	3.44	/CY													125	CY	430
	Disposal Costs	On site disposal	02220 240 5550	7.6	/CY													125	CY	950
	<b>Subtotal</b>																			1902
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	<b>Subtotal</b>																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	<b>Subtotal</b>																			
	<b>Total</b>																			13152

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Conveyor R 28																			
	Structure's Demolition Cost	Steel Bld. Large	02220 110 0012	0.2	/CF	1250	7	4								FT		35000	CF	7000
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			7000
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	3.62	/CY						20					CY		20	CY	72
	Concrete's Vol. Demolished																1.3	26	CY	
	Loading Cost	Front end loader 3 CY	02315 424 1300	1.39	/CY													26	CY	36
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. tr	02315 490 0320	3.44	/CY													26	CY	89
	Disposal Costs	On site disposal	02220 240 5550	7.8	/CY													26	CY	198
	Subtotal																			395
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			7395



	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Cleanup 01															
Wildcat Loadout Cleanup Coal Pile															
D9R Semi-U EROPS (9-54) (2H04)	17115	72.3	0.1	52	238.5	1	238.5	\$/HR	1500	CY	187	CY/HR	8	HR	1908
988F Series II 2000 EROPS (9-38) (3Q03)	0	0	0.1	52	52	1	52	\$/HR	1500	CY	187	CY/HR	8	HR	416
CLAB					41.55	1	41.55	\$/HR					16	HR	665
Foreman Average, Outside					57.3	1	57.3	\$/HR					16	HR	917
5,000 gal H2O truck Diesel (20-6) (2Q03)	0	0	0.1	42	42	1	42	\$/HR					16	HR	672
Pickup Truck Crew 4x4 1 ton (20-17) (2N04)	820	7.8	0.1	0	13.71	1	13.71	\$/HR					16	HR	219
															4797

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Regrading 02															
Wildcat Loadout Recontour/Regrade															
D9R Semi-U EROPS (9-54) (2H04)	17115	72.3	0.1	52	238.5	1	238.5	\$/HR	38872	CY	187	CY/HR	207.9	HR	49584
627G EROPS (9-40) (3Q02)	0	0	0.1	52	52	1	52	\$/HR	38872	CY	332.6	CY/HR	116.9	HR	6079
988F Series II 2000 EROPS (9-38) (3Q03)	0	0	0.1	52	52	1	52	\$/HR					207.9	HR	10811
CLAB					41.55	1	41.55	\$/HR					207.9	HR	8638
Foreman Average, Outside					57.3	1	57.3	\$/HR					207.9	HR	11913
5,000 gal H2O truck Diesel (20-6) (2Q03)	0	0	0.1	42	42	1	42	\$/HR					207.9	HR	8732
Pickup Truck Crew 4x4 1 ton (20-17) (2N04)	820	7.8	0.1	0	13.71	1	13.71	\$/HR					207.9	HR	2850
															98807

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Topsoil 03															
Wildcat Loadout TopSoil															
627G EROPS (9-40) (3Q02)	0	0	0.1	52	52	2	104	\$/HR	15549	CY	566	CY/HR	27.5	HR	2860
D9R Semi-U EROPS (9-54) (2H04)	17115	72.3	0.1	52	238.5	1	238.5	\$/HR	10000	CY	187	CY/HR	27.5	HR	6559
CLAB					41.55	1	41.55	\$/HR					27.5	HR	1143
Foreman Average, Outside					57.3	1	57.3	\$/HR					27.5	HR	1576
5,000 gal H2O truck Diesel (20-6) (2Q03)	0	0	0.1	42	42	1	42	\$/HR					27.5	HR	1155
Pickup Truck Crew 4x4 1 ton (20-17) (2N04)	820	7.8	0.1	0	13.71	1	13.71	\$/HR					27.5	HR	377
															10810

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Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Revegetation Costs																			
	Ground Preparation	Excavation Bulk Bank 2 CY (322BL)	02315 424 0260	1.7 /CY						69						AC		23460	CY	39882
	Seeding	Hydro Spreader (equip. & labor) B-81	Reveg005	19.13 /MSF						69						AC		3005.6	MSF	57497
	Seeding	Seed (material costs)	C0070331	\$356.30 /AC						69						AC		69	AC	24585
	Mulch	Hay bale	Reveg007	57.2 /ton						69						AC		138	ton	7894
	Mulch	Hydro Spreader (equip. & labor) B-81	Reveg005	19.13 /MSF						69						AC		3005.6	MSF	57497
	Subtotal																			187355
	25% Revegetation Rate																			46839
	Subtotal																			46539
	Total																			234194



## Bonding Calculations

## Direct Costs

Subtotal Demolition and Removal	\$142,944.00
Subtotal Backfilling and Grading	\$114,214.00
Subtotal Revegetation	\$234,194.00
Direct Costs	\$491,352.00

## Indirect Costs

Mob/Demob	\$49,135.00	10.0%
Contingency	\$24,568.00	5.0%
Engineering Redesign	\$12,284.00	2.5%
Main Office Expense	\$33,412.00	6.8%
Project Mainagement Fee	\$12,284.00	2.5%
Subtotal Indirect Costs	\$131,683.00	26.8%

Total Cost	\$623,035.00
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Escalation factor	0.0444
Number of years	1
Escalation	\$27,663.00

Reclamation Cost Escalated	\$650,698.00
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Bond Amount (rounded to nearest \$1,000) 2006 dollars	\$651,000.00
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